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| **Subject / Course:** Mathematics | **TC Name:** Brian Legros | |
| **Grade Level:** 7 | **Date:** October 26, 2010 | |
| **Topic:** Metric conversion | **Time of Class:** 60 min | |
| **AT Name:** Marriane Rogers | **Room # / Location:** Room 203 | |
| **1. Curriculum Expectation(s) and Goal(s) for the Lesson** | |  |
| 1. **Expectations**  |  | | --- | | **Measurement**   * solve problems that require conversion between metric units of measure (e.g., millimetres and centimetres, grams and kilograms, millilitres and litres) | | | |
| 1. **Goal(s) for the lesson:**  |  | | --- | | By the end of this lesson, students will be able to:   1. Use prefixes to calculate metric conversion 2. Use mnemonic to remember metric prefixes 3. Understand why standard measurement and correct units are needed 4. Solve problems involving conversion | | | |
| **2. Preassessment and Accommodations/Modifications** | | |
| |  |  | | --- | --- | | **Preassessment: (***State the issue)* | **Accommodation/Modification:** *(how will you adapt your lesson?)* | | **Academic Needs:** *(what will you do with the students who finish early or who cannot finish or understand the lesson***?)**  **Behavioural/Social/Emotional Needs:** *(Do you have students who are easily distracted, have short attention span, don’t participate or talk out constantly?)*  **Physical Needs:** *(do you have students with allergies, difficulty seeing or hearing, or with mobility issues?)*  **Diversity Needs:** *(do you have any ESL students? Are there cultural or language issues?)* | This activity builds on previous knowledge of measurement lengths. Students who finish early will have a chance to play the board game again and/or begin home activity.  Move about the classroom, use proximity to quiet disruptive student (A.), make sure he is on task.  Students who have difficulty viewing the screen will be moved to a more favourable position  There are no diversity issues in this lesson | | | |

1. **Learning Environment**

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| Students will be required to be seated at their own desks at the start of the lesson, pencils and math workbooks only on their desk.  Game dice will be on teachers desk  During group activities teacher will circulate about the triad groups ensuring students are on task and assisting with any questions.  All handouts and required answer sheets will be assembled and placed on teachers desk for distribution |

1. **The Overview (Agenda) for your lesson:**

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| 1. Minds On – Fermi problem 2. Video - History of Measurement 3. Group discussion – metric prefixes 4. Group Activity – board game 5. Consolidation - review conversion (Awareness video –if time) 6. Home activity 7. Ticket out the door |

1. **Resources and Materials for your class**

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| 1. Projector & laptop computer 2. Copies of conversion game and dice 3. Power point presentation 4. 25 metric conversion chart handouts 5. Home Activity worksheets – puzzle and extra questions 6. 25 Ticket out the door slips |

1. **Content, Teaching Strategies, for Lesson**

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| ***Time*** | ***Teaching or***  ***Assessment Strategy*** | ***Detailed Description*** |
| *41 min.* | *Introduction*  *Minds on*  *Measurement basics*  *Think-pair share*  *Cooperative learning* | 1. **(before class) Preparation**  * Before the start of the lesson, the teacher will ensure the projector and laptop are set up and functioning properly  1. **Transition (5 minute)**  * The teacher will get the attention of the class (5-4-3-2-1 all eyes on me) * The teacher will have the students clear their desk of all extra material and only have their math objects available * Ask students to look at Minds on question  1. **Introduction (10 minutes)**  * The teacher will play the video ‘History of measurement’  1. **Group Discussion (5 minutes)**  * Teacher will get class attention * Ask the students why is it a good idea to have one standard of measurement? * Discuss issues and problems of not having standards * Present prefixes of the metric conversion (on PowerPoint slide) * Discuss mnemonic (King Henry Doesn’t Usually Drink Chocolate Milk or Kangaroo Hopping Down Many Driveways Cause Mischief)  1. **Transition (3 minutes)**  * Have students work in pairs with someone at their table * Assign a random student to hand out game boards * Have tallest partner get die from teaches desk  1. **Group Work (15 Minutes)**  * The teacher will ask the students to play the game board * Must have a correct answer to move forward. Must land on ‘Home’ exactly. * Teacher will move about classroom observing student activity  1. **Transition (3 minutes)**  * Have students clean up paper game sheets * Tallest person in group puts paper in recycling * Shortest person in group returns dice to teachers desk * Students return to their own desk |
| *5 min.* | *Consolidation* | 1. **Group discussion (5 minutes)**  * Name any object that is most appropriately measured with the following units: centimetres, metres, kilometres, and millimetres. * Why is each unit used for this object? |
| *3 min.* | *Homework* | 1. **Home activity (3 minutes)**  * Metric crossword and worksheet |
| *2 min.* | *Ticket out the door* | 1. **Ticket out the door (2 min.)**  * Happy Face Chart. Have student circle a sad, neutral or happy face if they understood key concepts covered in the class (on a sheet of paper you hand out). This is handed back into the teacher. |

  

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